## A. Features

$>$ Timekeeping function, 6 digits LCD to display hour, minute, second (year, month, date).
$>8$ groups of alarm tone with vibration. Alarm time is 15 seconds each time. Vibrated time is 15 seconds each time.
$>1 / 100$ second stopwatch function. The stopwatch can use for measuring split time. The maximum display range of the stopwatch is 23 hours, 59 minutes, 59 seconds.
$>$ Countdown (The maximum countdown range is 23 hours 59 minutes 59 seconds. The countdown can be set in the range of 15 minutes to 23 hours 59 minutes. )
$>$ The countdown limited function: (1hour to 24 hours) can be set in a period of time allow to use the countdown function.
$>$ Locked function: Lock the system in order to avoid operating wrong. The watch can be run normally after unlocking.
> 12-hour /24-hour format display.
$>$ Keypad tone.
> EL backlight.

## B. Operational Manual



1. In non-setting mode, select operating mode by pressing B key. In any mode, hold A key, EL will light for 3 seconds

## 2. Timekeeping Function

$>$ In Timekeeping Mode, press D key to convert $12 \mathrm{H} / 24 \mathrm{H}$ format. Press C key to view date ( return to Timekeeping Mode automatically within 30 seconds)
> In Timekeeping Mode, hold down A key for 2 seconds to enter into Time Setting Mode, at this time, "second" starts to flash, and then press B key to step below items in sequence:

$>$ Press D key to adjust the flashing value.
> Press A key to confirm, then return to time mode.
$>$ Press A key to exit setting.

## 3. Alarm Function

> In Alarm Mode, press D key to turn on / off alarm or vibration, when alarm is on, alarm indicator " \|(m)" " will display on the screen. While alarm is off, there is no indicator display on the screen. There will be indicator " SSSS" display on the screen when vibrating, there is no indicator display when vibration is off.
> If the indicators of alarm and vibration are turned off together, there will be no vibration and alarm when counting down.
> If the alarm indicator and vibration indicator are turned on together, there will be vibration and alarm tone when counting down. (vibration-alarm tone with BB-vibration-alarm tone with BB).
$>$ Total 8 groups of alarm setting. Alarm tone can be set between alarm or vibration. Once one group alarm tone setting changed, the alarm tone of other groups will change accordingly.
> If one group of alarm turned on, and the indicators of alarm and vibration are also turned on, alarming or vibrating will last 15 seconds when the pre-set time reached. Pressing any key can stop alarming or vibrating during alarming.
> In Alarm Mode, press C key to view or set the time of 8 groups of alarm or vibration in sequence:

$\rightarrow$ In Alarm 1 Mode，hold down C key for 2 seconds to turn on／off alarm．When the alarm is turned on in Alarm 1，there will be indicator＂ $\mathbf{A}^{\text {＂display，while there is no indicator to display on the screen when }}$ the alarm is off．The above 8 groups of alarm turning on／off are in the same way．（The indicator of alarm 2 is＂国＂．The indicator of alarm 3 is＂ 3 ．The indicator of alarm 4 is＂ $\boldsymbol{A}$ ．The indicator of alarm 5 is＂A．The indicator of alarm 6 is＂自＂．The indicator of alarm 7 is＂县＂．The indicator of alarm 8 is＂男＂．）

## ＞Alarm Time Setting

$>$ In any group of alarm mode，hold down A key for 2 seconds to enter into alarm time setting，＂hour＂ starts to flash firstly，then＂minute＂starts to flash by pressing B key．Press D key to adjust，as below figures：

$>$ Press A key to confirm，then return to alarm mode．
$>$ The setting method of 8 groups of alarm／vibration are in the same way．
$>$ In Alarm Setting Mode，the watch will return to Time Mode automatically if you do not perform any key operation within 30 seconds．

## 4．Stopwatch and Split Time Function

$>$ The display range of the stopwatch is 23 hours， 59 minutes， 59 seconds．
$>$ ST is flashing when the stopwatch keeps time．
＞In Stopwatch Mode，press D key once to start stopwatch，then press D key again to stop it．Press C key means stopwatch gets to zero when it stops．
$>$ In Stopwatch Mode，Start to keep time by pressing D key，press C key to enter into split time，press D key again to exit split time and enter into the state of stopwatch stops．When exit the split time，press C key to display all times of the stopwatch，then press C key again，the stopwatch gets to zero．
$>$ When the stopwatch is running，press B key to return to Time Mode，the stopwatch is still running in the background．

## 5. Countdown Function

> Countdown can be limited to use in a period time of a day. Limit setting range ( 1 hour to 24 hour) minute, the "second" cannot be set.
> The countdown range (from 15 minutes to 24 hours), the countdown time cannot be set if less than 15 minutes
> Three methods can be chosen between countdown alarm tone function and vibration function ( This function only has after alarm indicator is turned on.)
> The limited time must be set more than countdown time when you first time to use countdown function.
> When the limited time and countdown time are set, the alarm indicator and vibration indicator are also turned on, alarm tone sounds or vibrates for 15 seconds when the countdown time is reached to zero, The watch will counting down repeatedly and automatically when you don't press any key during the alarm tone sounds or vibrates.
> If you press any key during alarm tone is sounding or vibrating., the watch will not counting down repeatedly.
> If alarm indicator or vibration indicator is turned off, the watch will not counting down repeatedly when countdown time is reached to " 0 "
> In countdown mode, press D button to start / stop counting down.You can press any key to stop the alarm tone or vibration when countdown time is reached to zero, but countdown will continue to run.
> In Countdown Mode, press D key to start / stop counting down, when countdown time is reached to zero, and press any key within alarming or vibrating time, the watch will return to original setting value automatically.
> When countdown is running, press B key to exit Countdown Display Mode, the countdown is still running in the background, and " TR " indicator will flash on the LCD screen.

## $>$ Countdown Setting

> In Countdown Mode, hold down A key for 2 seconds to enter into countdown limited setting. Firstly, "hour" is flashing at bottom limited time, then press B key in sequence: "hour" is flashing at top limited time---"minute" is flashing at countdown time---"hour" is flashing at countdown time, press D key to adjust, as below figures:

$>$ Press A key to exit from setting mode．
＞The watch start counting down at once after the countdown time display range is set reasonable，when countdown time reaches to＂ 0 ＂，alarm tone will sound or vibrate for 15 seconds．
＞If the countdown time display range is set unreasonable，or it is set reasonable，but delay a little time to start counting down，the watch will stop counting down automatically when countdown time is not reached to＂ 0 ＂．
＞In Countdown Setting Mode，the watch will back to Time Mode automatically if you do not perform any key operation within 30 seconds．

## ＞Lock Up Function

In Normal Mode，holding down B and C keys together for 2 seconds to lock the system．＂LOCK＂ indicator will display on the LCD screen，（except EL function）other keys won＇t be used．Hold down B and C keys together for 2 seconds to release the keys，at this time，＂LOCK＂indicator will not display on the LCD screen，all keys can be used．After system is locked，you can press any key to stop alarm tone or vibration when countdown time is reached to 00 ，but countdown will continue to run．In alarm mode， you can press any key to stop alarm tone after it starts to sound．

## C．Specification

$>$ Module dimension（inclusive protrusion）$\quad$ ：$\Phi 26.2 \mathrm{~mm}$
$>$ Thickness（inclusive buzzer）：$\pm 8.8 \mathrm{~mm}$
$>$ Working temperature range ：$-10^{\circ} \mathrm{C} \sim+60^{\circ} \mathrm{C}$
$>$ Working voltage
： 3.0 V
$>$ Time accuracy
$: \pm 60$ seconds／month
$>$ Battery code and capacity $\quad$ CR2032（220mAh）
$>$ Static average driving current
$: \leq 2.47 \mathrm{u} \mathrm{A}$（Static maximum driving current： 4.0 u A）
$>$ Average current of EL backlight illumination
$: \leq 3.01 \mathrm{u}$ A（Maximum current of EL backlight illumination： 6 m A ）
$>$ Alarm average driving current
$: \leq 1.21 \mathrm{~m} \mathrm{~A}$（Alarm maximum driving current： 6 m A ）
$>$ Vibration average current
$: \leq 41.15 \mathrm{~m} \mathrm{~A}$（Vibration maximum current： 70 m A ）
$\rightarrow$ Battery life
： 12 months（Japan Lithium）

According these standards to calculate battery life ：EL backlight illuminates twice（ 6 seconds）per day．Alarm tone sounds 3 times（ 45 seconds）per day．Vibration tone sounds 3 times（ 45 seconds）per day．Vibration Average Current $\leq 30 \mathrm{~m} \mathrm{~A}$ ．

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